

IN THE CLAIMS:

Please amend the claims as follows:

1. (Currently Amended) ~~A method~~ Method for purification of contaminated water by hydrate formation and separation of hydrates from contaminated water enriched with contaminants characterized in that the water to be purified is passed via a first pipe into a first container with suitable pressure and temperature conditions to obtain hydrate formation, in said container the water is mixed with a hydrate-forming compound which is supplied via a second pipe some of the mixture of hydrate and contaminated water is recycled to said first container via third pipe as hydrate-forming seed, and the rest is passed to a separator where the mixture is separated into contaminated water and pure hydrate, the hydrate is passed to a second container via a fourth pipe, in said second container the temperature is raised so that the hydrate dissociates into pure water and hydrate-forming compound, the hydrate-forming compound from said second container is passed back to the first container for hydrate formation via said second pipe and the pure water is taken out as a product.
2. (Currently Amended) ~~Method~~ The method according to Claim 1, ~~characterized in that~~ wherein the contaminants comprise one or more components selected from the group consisting of hydrocarbons, organic and inorganic salts, dust, mud, metals, sand, gas, radioactive compounds, and biological material.
3. (Currently Amended) ~~Method~~ The method according to Claim 1, ~~characterized in that~~ wherein the contaminants which have been separated off are handled by recirculation to upstream process steps or deposition/disposal.
4. (Currently Amended) ~~Method~~ The method according to Claim 1, ~~characterized in that~~ wherein hydrate formation is carried out in several steps by subjecting the contaminated water from the separator to repeated hydrate formation processes in

series until the concentration of contaminants in the contaminated water is too high for further hydrate formation.

5. (Currently Amended) Method The method according to Claim 1, characterized in that wherein the harvested hydrates from the separator are subjected to a washing step prior to dissociation to pure water and hydrate forming gas.

6. (Currently Amended) Method The method according to Claim 1, characterized in that wherein the hydrate forming compound supplied to the first container through the second pipe is selected from lower hydrocarbons, CO₂, halogenated hydrocarbons, wherein halogen is selected from chlorine and fluorine, tetrahydrofuran, ethylene oxide, noble gases selected from helium, neon, argon, xenon, krypton, sulphur hexafluoride, dinitrogen oxide, preferably C₁-C₅ hydrocarbons or CO₂, more preferably methane, ethane, propane, CO₂, most preferably methane or CO₂.

7. (Currently Amended) Method The method according to Claim 1, characterized in that wherein the pressure and temperature conditions are:

T < 30°C, P > 1 bar, preferably T < 20°C, P > 5 bar, most preferably T < 10°C, P > 20 bar.

8. (Currently Amended) Method The method according to Claim 1, characterized in that wherein the hydrate particles which are supplied through the third pipe to the hydrate formation step have a diameter of maximum 3 mm, preferably maximum 500 µm, still more preferably maximum 100 µm.

9. (Currently Amended) Method The method according to Claim 1, characterized in that wherein the hydrate harvesting process is selected from the group consisting of sedimentation, filtration, centrifugation, flotation.

10. (Currently Amended) ~~Method~~ The method according to Claim 1, ~~characterized in~~
that wherein the hydrates dissociate through an increase in temperature and/or
reduction in pressure.

11. – 14. (Cancelled)